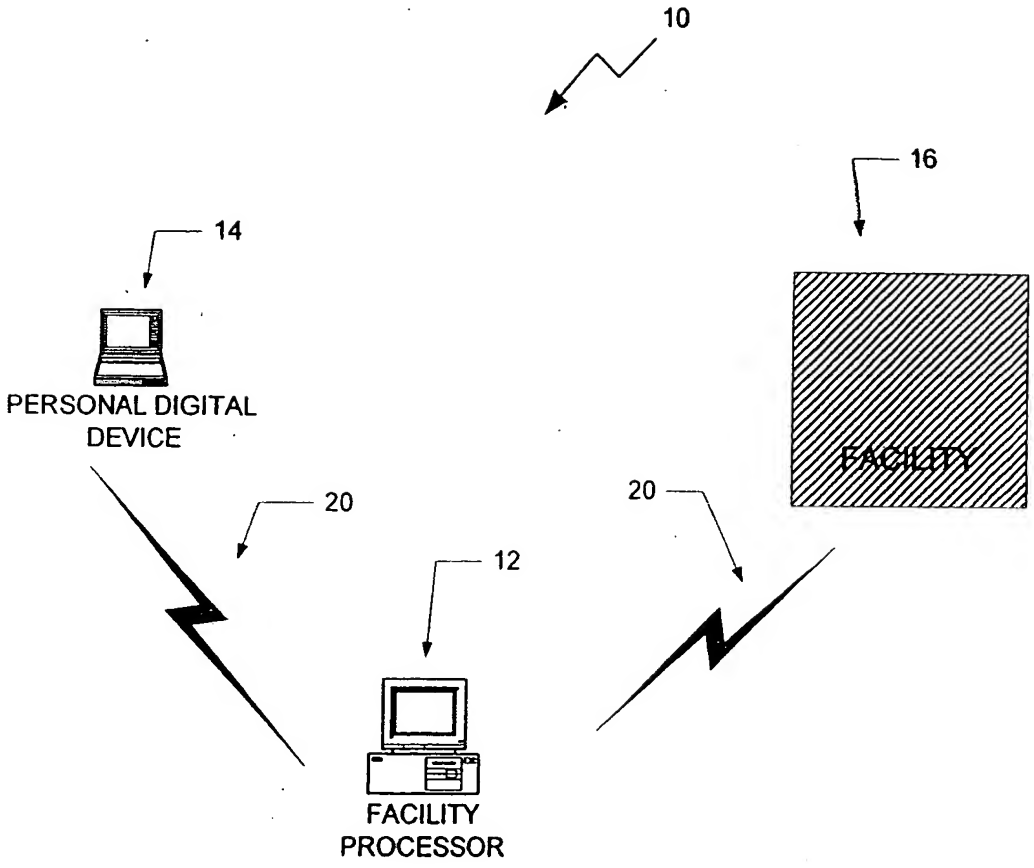
10
16
14
PERSONAL DIGITAL DEVICE
FACILITY
20
20
12
FACILITY PROCESSOR

FIGURE 1

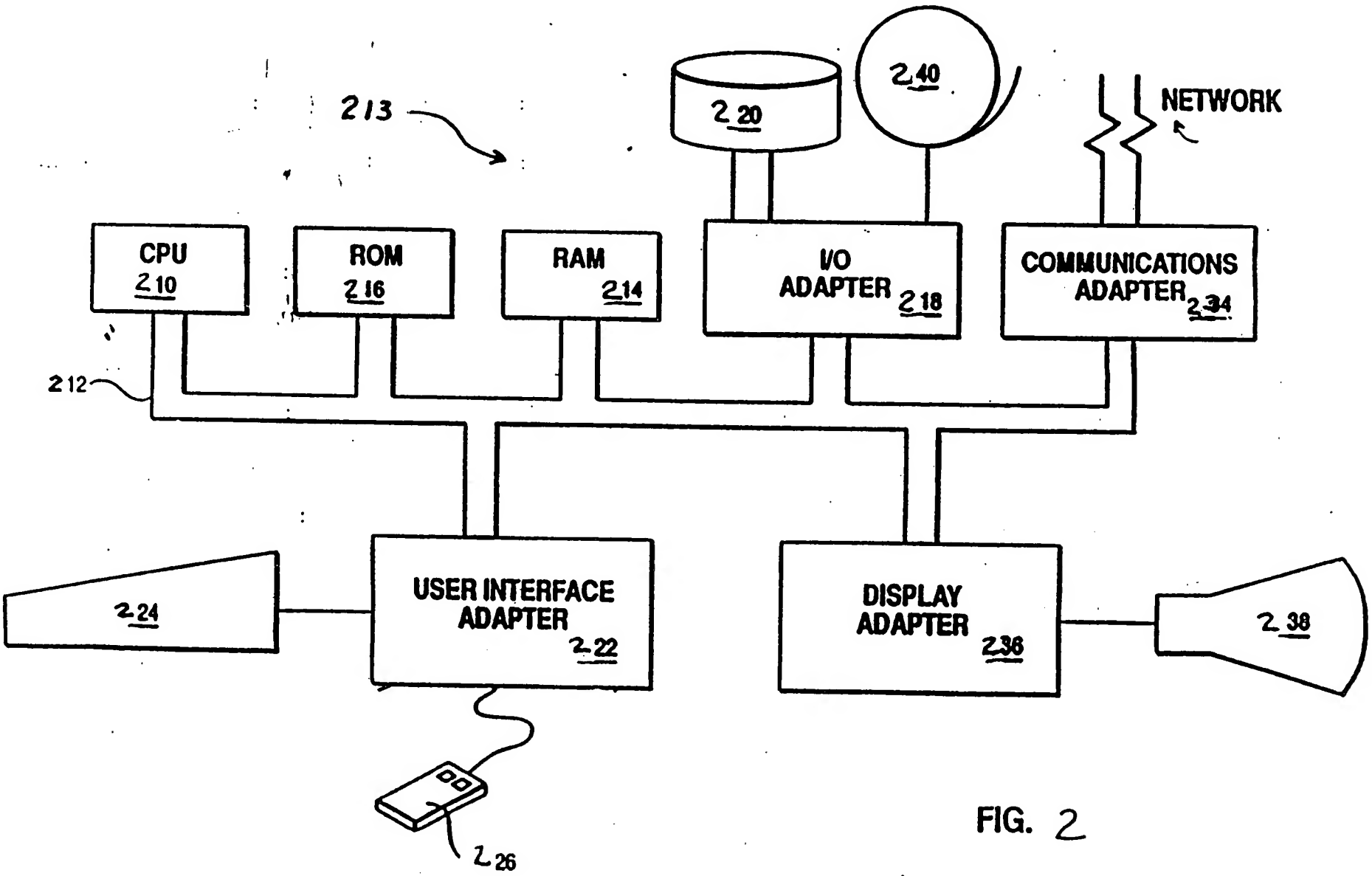
213
220
240
NETWORK
CPU
210
ROM
216
RAM
214
I/O
ADAPTER
218
COMMUNICATIONS
ADAPTER
234
212
224
USER INTERFACE
ADAPTER
222
DISPLAY
ADAPTER
236
238
226

FIG. 2

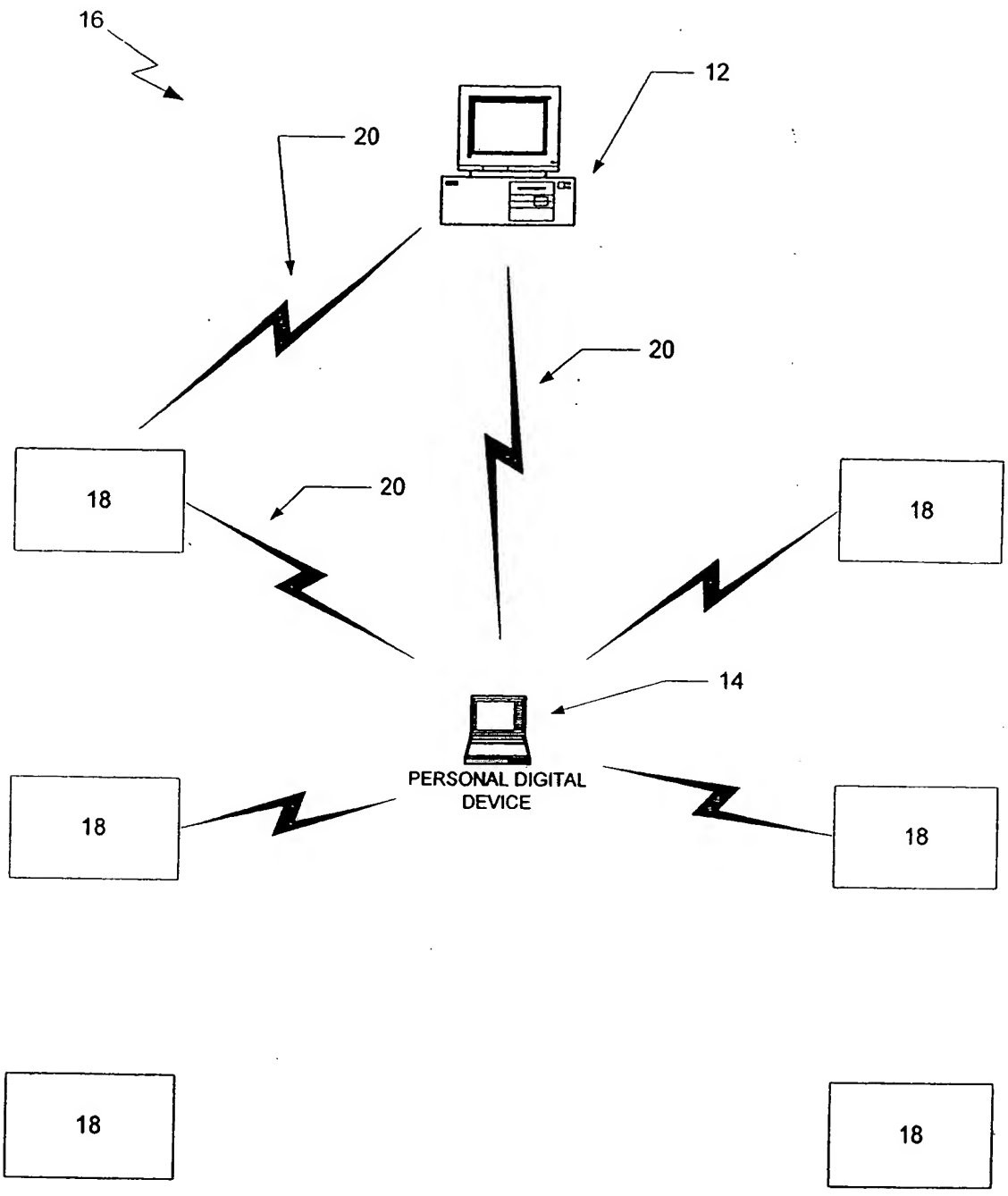

FIGURE 3

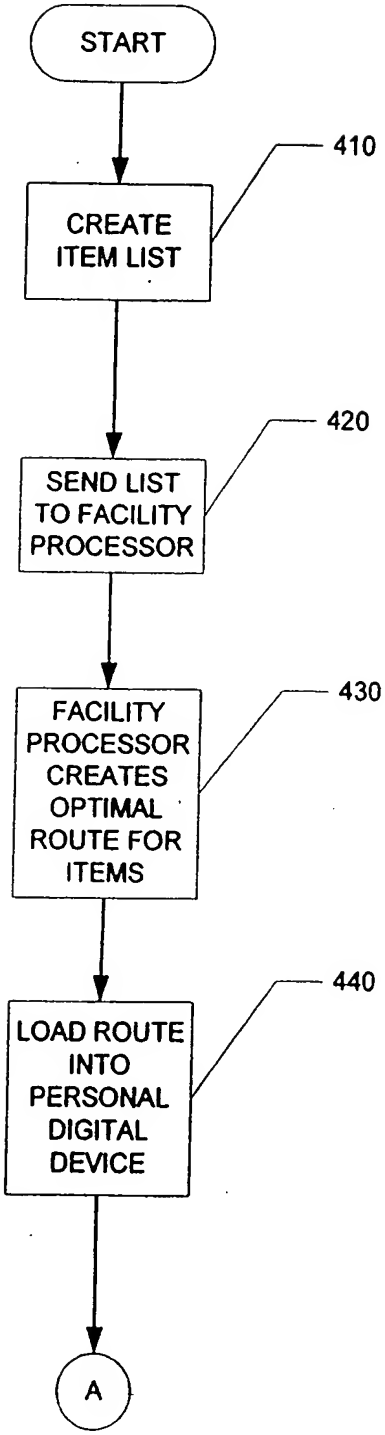
START
410
CREATE ITEM LIST
420
SEND LIST TO FACILITY PROCESSOR
430
FACILITY PROCESSOR CREATES OPTIMAL ROUTE FOR ITEMS
440
LOAD ROUTE INTO PERSONAL DIGITAL DEVICE
A

FIGURE 4

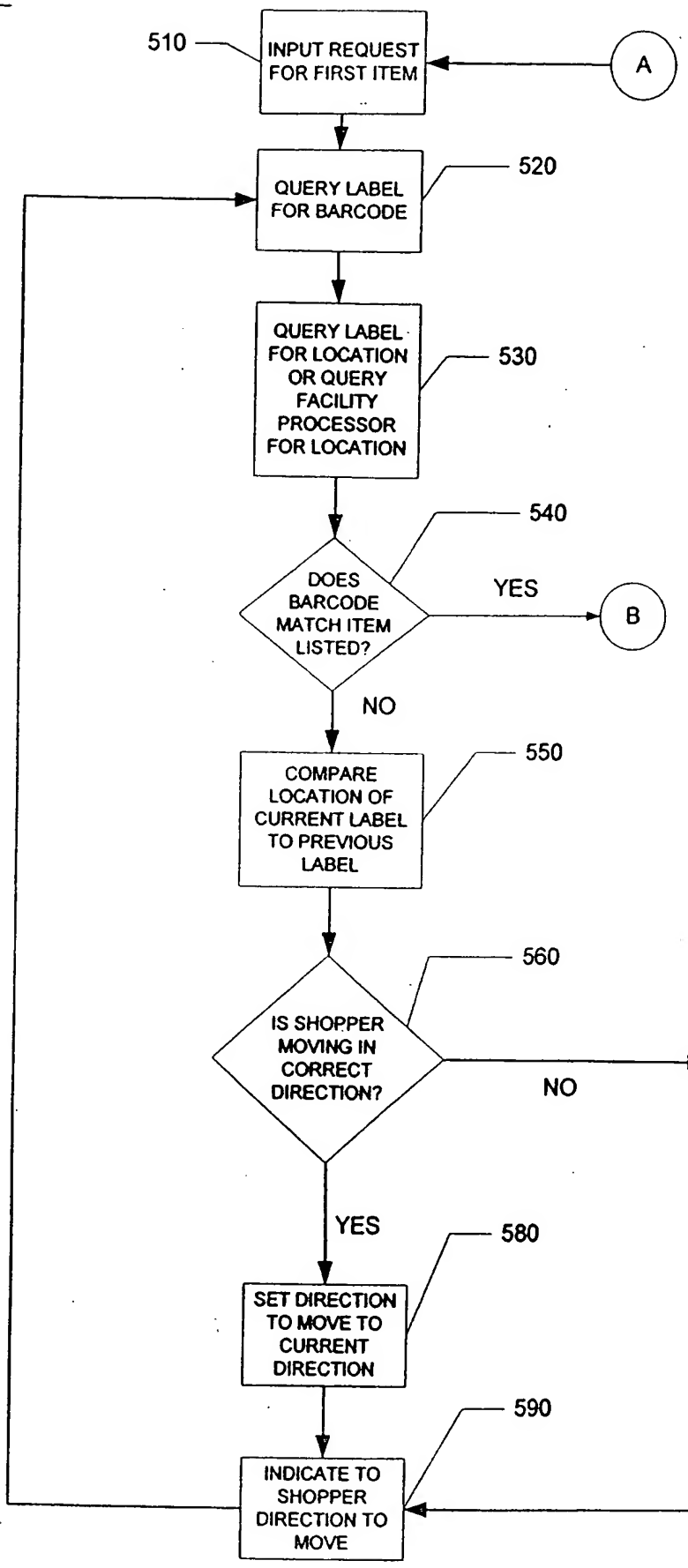
510
INPUT REQUEST FOR FIRST ITEM
A
520
QUERY LABEL FOR BARCODE
530
QUERY LABEL FOR LOCATION OR QUERY FACILITY PROCESSOR FOR LOCATION
540
DOES BARCODE MATCH ITEM LISTED?
YES
B
NO
550
COMPARE LOCATION OF CURRENT LABEL TO PREVIOUS LABEL
560
IS SHOPPER MOVING IN CORRECT DIRECTION?
NO
570
CALCULATE NEW DIRECTION TO MOVE
YES
580
SET DIRECTION TO MOVE TO CURRENT DIRECTION
590
INDICATE TO SHOPPER DIRECTION TO MOVE

FIGURE 5A

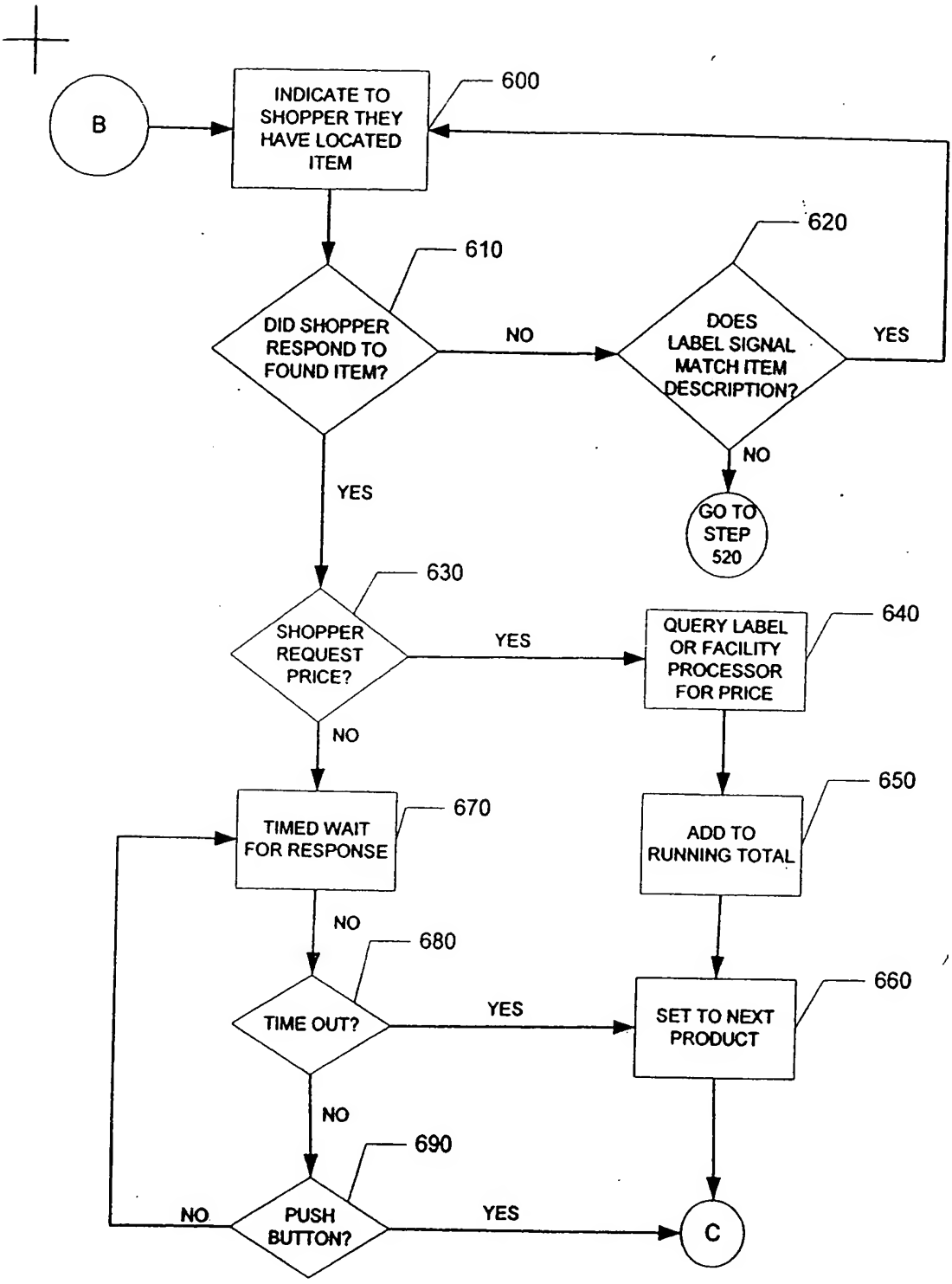
B
INDICATE TO SHOPPER THEY HAVE LOCATED ITEM
600
DID SHOPPER RESPOND TO FOUND ITEM?
610
NO
DOES LABEL SIGNAL MATCH ITEM DESCRIPTION?
620
YES
NO
GO TO STEP 520
YES
SHOPPER REQUEST PRICE?
630
YES
QUERY LABEL OR FACILITY PROCESSOR FOR PRICE
640
NO
TIMED WAIT FOR RESPONSE
670
ADD TO RUNNING TOTAL
650
NO
TIME OUT?
680
YES
SET TO NEXT PRODUCT
660
NO
PUSH BUTTON?
690
NO
YES
C

FIGURE 5B

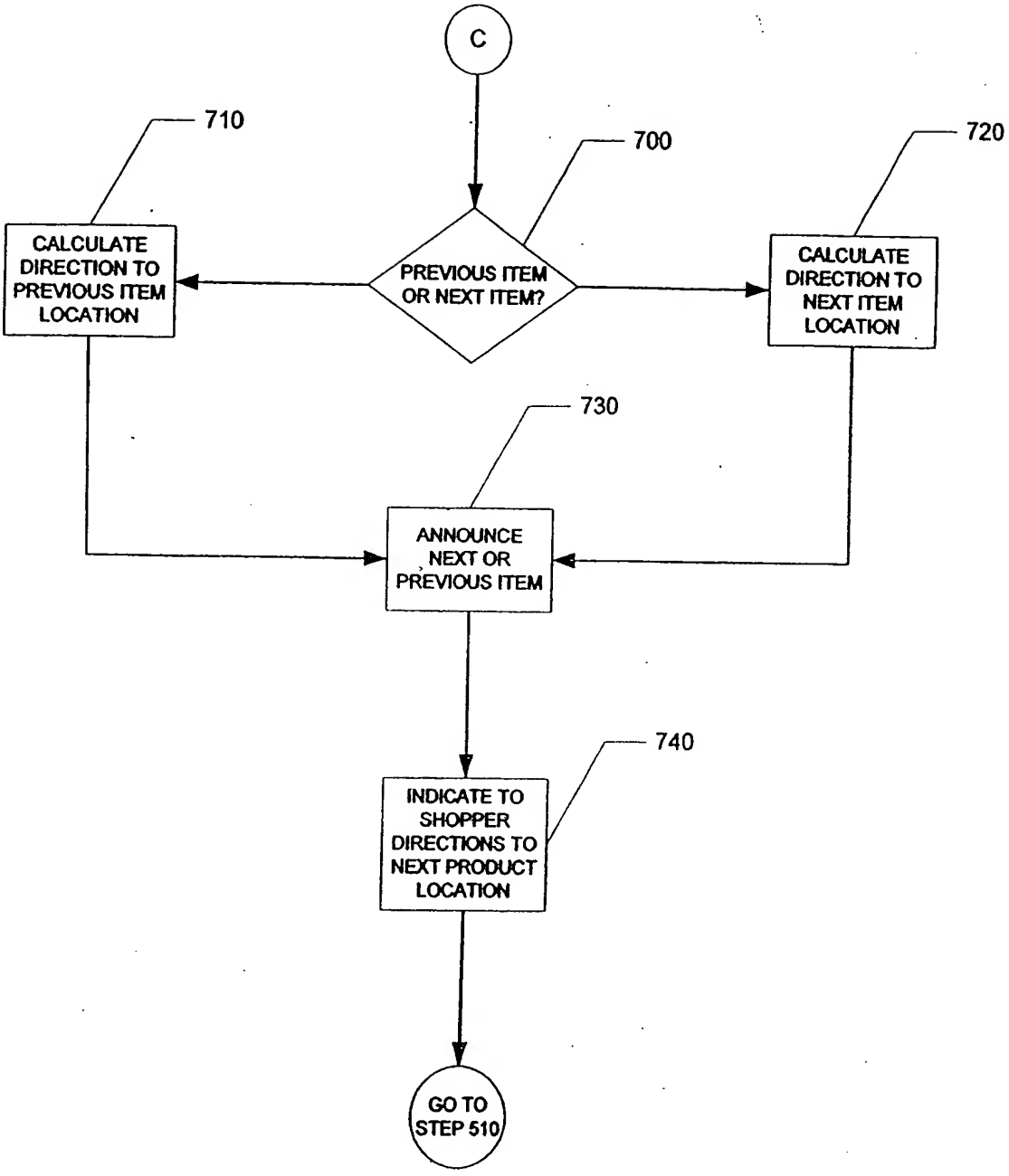
C
710
700
720
CALCULATE DIRECTION TO PREVIOUS ITEM LOCATION
PREVIOUS ITEM OR NEXT ITEM?
CALCULATE DIRECTION TO NEXT ITEM LOCATION
730
ANNOUNCE NEXT OR PREVIOUS ITEM
740
INDICATE TO SHOPPER DIRECTIONS TO NEXT PRODUCT LOCATION
GO TO STEP 510

FIGURE 5C